



Water Desalination

Lead Department: Water
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Background

The San Diego Water Department services 1.2 million customers, including the largest concentration of military bases in the United States. It is one of the ten largest water suppliers in the nation – providing 206 MGD per day. By the year 2030, the City's population and economic growth is projected to increase water demands by about 55 million gallons a day (MGD) or 25 percent over 2002 levels.

The City presently imports approximately 90% of its water supply from northern California and the Colorado River. Local reservoirs owned and operated by the City supply about 10 to 15 percent of need. The City's Long-Range Water Resources Plan, adopted by the San Diego City Council on December 9, 2002, calls for a flexible strategy for the next 30 years, implemented in three 10-year phases. The principal strategies are:

- Conservation
- Recycled water
- Groundwater storage and treatment
- Water transfers
- Desalination

Water desalination provides one potential new source of water supply. This strategy can be applied both to sea water and to brackish groundwater. Desalination of brackish groundwater offers the City of San Diego greater viability than sea water desalination. Environmentally sound disposal of brine from the desalination process is a critical component. Water desalination is an energy-intensive process. Therefore, maintaining reasonably priced energy costs are essential to the viability of this technology.

State Strategies

- Support the San Diego County Water Authority (CWA) in its efforts to promote ocean desalination as a viable and affordable technology in San Diego County. The CWA has identified Encina and San Onofre as preferred sites for sea water desalination projects.

- Ensure that legislation related to desalination programs is supportive of both seawater and brackish water programs.
- Support legislation promoting a reliable supply of reasonably priced energy.

Federal Strategies

- Seek \$1million from the U.S. Bureau of Reclamation Title 16 program for identified brackish groundwater projects in the City of San Diego.
- Support/initiate legislation providing local agencies with funding for analyzing potential desalination programs, emphasizing the concept of using wells to extract seawater thereby minimizing environmental impacts.
- Support/initiate legislation providing local agencies with funding for analyzing brackish groundwater desalination. A plan including brackish groundwater desalination has been formulated for the San Pasqual groundwater basin.
- Support measures such as the Energy Bill that maintain affordable prices for reliable supplies of energy.

Supporters and Possible Supporters:

- Association of California Water Agencies (ACWA)
- MWD and CWA
- National Desalination Group (CWA & MWD are members)
- Sweetwater Authority
- ACWA
- National Desalination Group